

Fig. 1

sample is taken from the patient and the DNA of the patient is analyzed in order to obtain patient data with respect to the methylation status at selected sites of the DNA of the patient

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Information is provided to a computing device that contains:

knowledge base about a plurality of different methylation statuses at selected sites of the DNA in cells with a known disease or medical condition and/or healthy cells

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knowledge base that includes a plurality of expert rules for evaluating and selecting a type of disease or medical condition based on the methylation status at selected sites of the DNA of a patient in light of the provided patient information

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generate list of possible known diseases or medical conditions

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display listing

manually determine available treatment options for the patient in light of the patient information and to manually generate advisory information

knowledge base that includes a plurality of different therapeutic regimens for diseased cells or medical conditions

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knowledge base that includes a plurality of expert rules for evaluating and selecting available treatment options for the patient in light of the selected type of disease or medical condition based on the methylation status at selected sites of the DNA of the patient

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generate list of different therapeutic regimens for diseased cells or medical conditions

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display listing

manually determine available treatment options for the patient in light of the patient information and generate advisory information

knowledge base of advisory information

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generate list of available advisory information for the available treatments

display advisory information

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apply treatment to the patient in need

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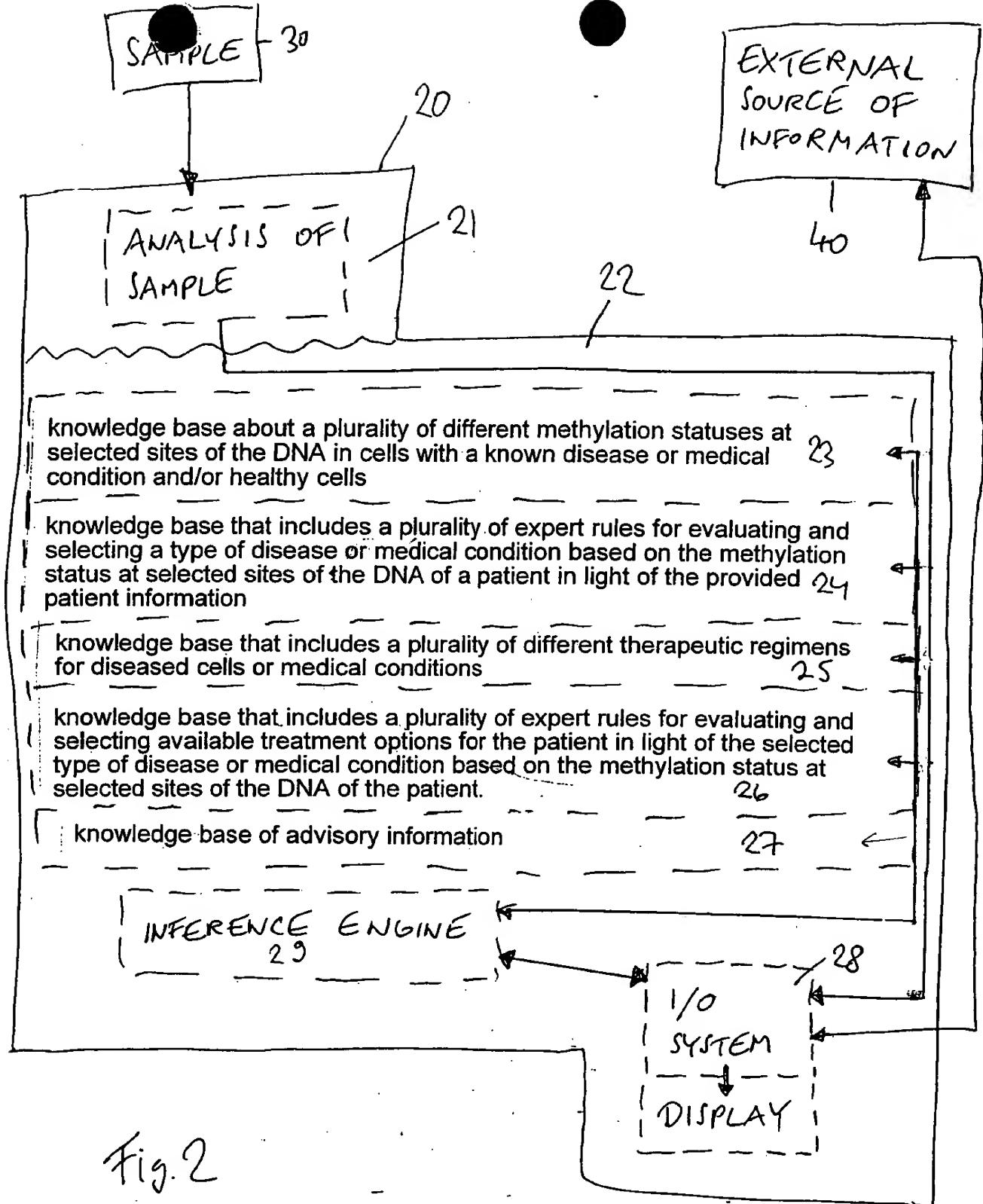


Fig. 2

Fig 3

